

P.

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Jewell

Poisoning from opium.

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Kennedy

Nitrous acid as a substitute  
for blisters.

Killett.

Nitrous acid as a substitute  
for blisters.

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R. Martle

Tania cured by oleum  
Terebinthinæ.

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inodorous, and has a very pungent taste. Introduced into the nostrils, it acts as a violent sternutory. It restores the blue colour of reddened litmus paper. It is a little soluble in water, but perfectly so in alcohol.

Thus there are now at least seven new alkalis: morphine, strychnine, delphine, atropine, daphnine, daturine, and sebadilline. It is probable that the list will still increase till Chemists have recognised, in these apparently different substances, a common base.

#### BOTANY.

VIII. *New Febrifuge Plant*\*.—In the Madrid Gazette, under the date of June 25, 1819, is announced a new febrifuge plant, known to the Indians of Quito, by the name of *chinininka* (pronounced as *chinininga*). It is a shrub of a new genus. Dr. Joseph Pavon has named it *unanuea febrifuga*, and presented it to the Academy of Sciences of Madrid. Some experiments have already been made upon it in intermittent fever; and several well-known Physicians have obtained great success from giving a scruple of the root, in powder, every three hours. The dose is afterwards raised to half a dram; and by this mean, the febrile paroxysms, which had resisted even the cinchona, have been prevented.

W. T. Brande.

Table exhibiting the Average Quantity of Spirit in different kinds of Wine. By W. T. BRANDE, ESQ. Sec. R.S. &c.

SINCE the publication of the Researches upon the State of Spirit in Fermented Liquors, contained in the Philosophical Transactions for the years 1811 and 1813, I have, through the kindness of different friends, had ample opportunities of extending my experiments; and to my former list of wines, already copious, a few additions have been made, of which I have from time to time given notice, and which are put down in the following table. It does not seem necessary, in this place, to allude to the experimental details, nor to notice the precautions required in conducting the distillations, as they are fully given in the papers above noticed. I have therefore



omitted the column, which will be found in the Philosophical Transactions (1811; p. 345), shewing the specific gravity of the distilled liquor upon which the calculations are founded.

<i>Proportion of Spirit per Cent. by Measure.</i>		<i>Proportion of Spirit per Cent. by Measure.</i>	
1. Lissa... ..	26.47	24. Rousillon.....	19.00
Ditto... ..	24.35	Ditto.....	17.26
Average... ..	25.41	Average... ..	18.13
2. Raisin Wine... ..	26.40	25. Claret.....	17.11
Ditto... ..	25.77	Ditto.....	16.32
Ditto... ..	23.20	Ditto.....	14.08
Average... ..	25.12	Ditto.....	12.91
3. Marsala... ..	26.3	Average.....	15.10
Ditto... ..	25.5	26. Malmsey Madeira....	16.40
Average... ..	25.9	27. Lunel.....	15.52
4. Madeira.....	24.42	28. Sheraaz.. ..	15.52
Ditto... ..	23.93	29. Syracuse.. ..	15.28
Ditto (Sercial)... ..	21.40	30. Sauterne.....	14.22
Ditto... ..	19.24	31. Burgundy.....	16.60
Average... ..	22.27	Ditto.. ..	15.22
5. Currant Wine.....	20.55	Ditto.. ..	14.53
6. Sherry.....	19.81	Ditto.....	11.95
Ditto.....	19.83	Average.....	14.57
Ditto.....	18.79	32. Hock.....	14.37
Ditto.....	18.25	Ditto.....	13.00
Average.....	19.17	Ditto (old in cask)....	8.88
7. Teneriffe.....	19.79	Average.....	12.08
8. Colares....	19.75	33. Nice.....	14.63
9. Lachryma Christi....	19.70	34. Barsac.....	13.86
10. Constantia, white....	19.75	35. Tent.....	13.30
11. Ditto, red.....	18.92	36. Champagne (still)....	13.80
12. Lisbon.. ..	18.94	Ditto (sparkling).....	12.80
13. Malaga, (1666.).....	18.94	Ditto (red).....	12.56
14. Bucellas... ..	18.49	Ditto (ditto).....	11.30
15. Red Madeira.....	22.30	Average.....	12.61
Ditto.....	18.40	37. Red Hermitage.....	12.32
Average.....	20.35	38. Vin de Grave.....	13.94
16. Cape Muschat.....	18.25	Ditto.....	12.80
17. Cape Madeira.....	22.94	Average... ..	13.37
Ditto.....	20.50	39. Frontignac.....	12.79
Ditto.....	18.11	40. Cote Rotie.....	12.32
Average.....	20.51	41. Gooseberry Wine....	11.84
18. Grape Wine.....	18.11	42. Orange Wine—Aver-	
19. Calcavella.....	19.20	age of six samples	
Ditto.....	18.10	made by a London	
Average.....	18.65	manufacturer.....	11.26
20. Vidonia.....	19.25	43. Tokay.....	9.83
21. Alba Flora... ..	17.26	44. Elder Wine.....	9.87
22. Malaga.....	17.26	45. Cider, highest average	9.87
23. White Hermitage,...	17.43	Ditto, lowest ditto....	5.21

Proportion of Spirit per Cent. by Measure.		Proportion of Spirit per Cent. by Measure.	
46. Perry, average of four samples.....	7.26	50. Lon. Porter (average)	4.20
47. Mead.....	7.32	51. Ditto Small Beer (do.)	1.28
48. Ale (Burton)....	8.88	52. Brandy .....	53.39
Ditto (Edinburgh)...	6.20	53. Rum.....	53.68
Ditto (Dorchester)....	5.56	54. Gin.....	51.60
49. Brown Stout.....	6.80	55. Scotch Whiskey.....	54.32
		56. Irish ditto.....	53.90

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## PART IV.

# FOREIGN MEDICAL SCIENCE AND LITERATURE.

## CHEMISTRY.

III.—*M. Pelletier* has analysed the nature of the venom of the common toad, and given the following account of it\*.

“ The fluid, which the common toad (*Rana bufo*) contained in the vesicles which cover the skin, is of a yellow colour and an oily consistence. Exposed to the air it soon becomes concrete, and, if it be received upon a plate of glass, it can be raised in the form of solid and transparent scales, after a few seconds. The venom of the toad, whether in the solid or the liquid form, is extremely bitter, acrid, and even caustic; it reddens strongly the tincture of litmus, and forms an emulsion with water. Alcohol when cold scarcely acts upon it; but, when hot, it attacks and dissolves a part of it, and acquires a fawn colour. The portion undissolved in the alcohol is perfectly white, without odour or taste, and resembles gelatinous membranes.

“ The alcoholic solution scarcely reddens litmus, and even loses entirely that property by evaporation. As the alcohol is disengaged, a fat, oily matter separates, which concretes on cooling, is insoluble in water, a little soluble in ether, but much more so in alcohol. Its taste is very bitter, but it is neither acrid nor caustic. Far from reddening litmus, it restores, when aided by heat, the blue colour when that has been reddened by an acid. These phenomena seem to indicate—1st, that the acid

\* *M. Pelletier* read his paper on this subject to the *Société Médicale d'Emulation*.



of the venom is volatile;—2, that it is partly saturated by a base to which it loosely adheres, and which, in uniting itself to another acid, employed to redden the litmus, allows the blue colour of that substance to be re-established.

“ I have not been able to isolate this acid, which is not astonishing when we consider its volatility and the small quantity of matter on which I had to work.

“ As to the gelatinous matter insoluble in alcohol, it does not dissolve in cold water, but does so in hot water, communicating to it a gelatinous property. On cooling, the water takes an opaline aspect and a certain consistence. This matter might be regarded as gelatine; nevertheless it is not precipitated either by chlorine or by infusion of gall-nuts. From comparative experiments made with isinglass, no doubt remained of the distinct character of the two substances.

“ From these facts it may be concluded, that the venom of the toad contains—1, an acid, partly united to a base, and constituting one twentieth part of the whole:—2, very bitter fat matter:—3, an animal matter, having some analogy with gelatine, but apparently differing from it in some respects\*.”

#### VIII. ON THE POISON OF THE TOAD.—(*Rana Bufo*.)

WE noticed in our last Number (April, p. 379) a communication lately made to the Royal Society by Dr. J. Davy, on the poison of the common toad.

In that notice we gave Dr. Davy credit for recalling the attention of naturalists to this subject, and furnishing us with grounds for believing that the notions long entertained by the vulgar, with respect to the poisonous qualities of the toad, were really well founded, though contrary to the opinions most generally received among the learned in the present day.\*

Since the publication of that article, however, our attention has been directed to one or two passages in the work of Messrs. Paris and Fonblanque on Medical Jurisprudence, published in 1823, which contain, it must be confessed, much of that information, &c. for which we and others had inadvertently given credit to Dr. Davy. We deem it, therefore, but justice to all parties to lay these passages also before our readers, leaving it at the same time to every one to form his own opinion on the subject.

Our authors, after detailing at some length the opinions formerly entertained upon this subject, proceed thus :

‘ Modern naturalists recognise no poisonous *species of toad*; even the most formidable of *the species* to appearance, that of Surinam, is said to be perfectly harmless.†

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\* ‘ Ce sont des animaux d’une forme hideuse, degoutante, que l’on accuse mal à propos d’être venimeux par leur salive, leur morsure, leur urine, et même par l’humeur qu’ils transpirent.’—(CUVIER, *sur les Crapauds*, *Regne Animal*, vol. ii. p. 94.)

† In this short sentence the term *species* is employed, first in a *specific*, and then again in a *generic* sense—an irregularity we should not have expected to find in a scientific publication of the present day.



‘ It has, however, been shewn by late experiments, that the *toad* has, under particular circumstances, the power of ejecting from the surface of the body *an acrid secretion, which excoriates the hands* of those that come in contact with it;\* and this fact may perhaps have assisted in supporting the general belief respecting the poisonous nature of this reptile.

‘ Pelletier has ascertained that this corrosive matter, contained in the vesicles which cover the skin of the common toad; has a yellow colour, and an oily consistence; and to consist of, 1st, an acid, partly united to a base, and constituting  $\frac{1}{20}$ th part of the whole; 2d, a very bitter, fatty matter; 3d, an animal matter bearing some analogy to gelatine.’—(*Medical Jurisprudence*, vol. ii. p. 139.)

*Russian Remedy for Hydrophobia.*—“ Take a good-sized root of *Alisma Plantago*, and two or three small ones; pound or reduce them all into a very fine powder, which spread on a piece of buttered bread and give it to the patient. Two doses, or three at most, are sufficient to eradicate the virulency of the poison, let it be ever so violent, even if the patient be already in the worst state, so as to be afraid of water. The efficacy of this root cures also animals bitten by mad dogs, and even mad dogs themselves. During the last twenty-five years, this remedy has not once failed; but has uniformly been a sure means of successfully restoring every person to their former health without any bad consequences afterwards; even those, who, from the violence of the poison, rushed upon people and bit them; which facts are particularly ascertained in the government of Toola.

“ The plant may be gathered during the whole of the summer, but it operates more efficaciously if gathered at the latter end of August; the roots of it, being taken up and washed clean from mud or other earthy matter, must be dried.”—(*Translated from the Russian, and communicated in a letter to Sir Walter Farquhar.*)

### 8. *Cubebs.*

THE following are the results of an analization of Cubebs, made by M. Vauquelin, at the request of the Société de Médecine de la Faculté de Paris:—

1. A volatile oil, nearly concrete.
2. A resin similar to that of balsam of copaiba.
3. A small quantity of another coloured resin.
4. A gummy coloured matter.
5. An extractive principle, analogous to that which is found in the leguminous plants.
6. Certain saline substances.

“ I hope,” says the celebrated Chemist to whom we owe this memoir, “ that this analysis, on which I have bestowed much care, will assist in affording some directions to the Physician who thinks it right to make use of the Cubeb.”—(*Bulletin de la Faculté de Médecine*, 1820, No. 3.)

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[Having already considerably exceeded our usual limits, we must delay our List of New Foreign Works till the publication of our next Number.]